

have been titled "Propranolol Withdrawal Complicating Bilateral Nephrectomy."

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REFERENCES

1. Goldberg AD, Raftery EB, Wilkinson P: Blood pressure and heart rate and withdrawal of antihypertensive drugs. *Br Med J* 1(6071):1243-1246, May 14, 1977
2. Horwitz D, Pettinger WA, Orvis H, et al: Effects of methyldopa in fifty hypertensive patients. *Clin Pharmacol Ther* 8:224-234, Mar-Apr 1967
3. Frewin DB, Penhall RK: Rebound hypertension after sudden discontinuation of methyldopa therapy. *Med J Aust* 1(18):659, Apr 30, 1977
4. Burden AC, Alexander CP: Rebound hypertension after acute methyldopa withdrawal. *Br Med J* 1(6017):1056-1057, May 1, 1976
5. Scott JN, McDevitt DG: Rebound hypertension after acute methyldopa withdrawal (Letter). *Br Med J* 2(6031):367, Aug 7, 1976
6. O'Brien ET, MacKinnon J: Propranolol and polythiazide in treatment of hypertension. *Br Heart J* 34:1042-1044, Oct 1972
7. Miller RR, Olson HG, Amsterdam EA, et al: Propranolol-withdrawal rebound phenomenon—Exacerbation of coronary events after abrupt cessation of antianginal therapy. *N Engl J Med* 293:416-418, Aug 28, 1975
8. Chrysant SG, Whitsett TL: Withdrawal of antihypertensive therapy (Letter). *JAMA* 239:2241-2242, May 26, 1978
9. Weber MA: Blood pressure rebound following withdrawal of antihypertensive treatment (Letter). *JAMA* 239:833, Feb 27, 1978
10. Whitsett TL, Chrisvanthakopoulos S: Evaluation of abrupt cessation of therapy with clonidine. *Clin Pharmacol Ther* 17:119, 1979
11. Whitsett TL, Chrysant SG, Dillard BL, et al: Abrupt cessation of clonidine administration: A prospective study. *Am J Cardiol* 41:1285-1290, Jun 1978
12. Hoobler SW, Kashima T: Central nervous system actions of clonidine in hypertension. *Mayo Clin Proc* 52:395-398, Jun 1977

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Dr. Steinberg Replies

TO THE EDITOR: Dr. Houston's letter raises several important points that need clarification. Semantics are a problem in this field, but our report is not a simple case of hypertensive medication being stopped and restarted. In our patient, the cause of the hypertension, which was excessive renin from end-stage kidneys, was removed.

Severe postoperative hypertension in a patient who is volume depleted by dialysis, who has no measurable renin and who still has a blood pressure of 270/120 mm of mercury, should not be confused with the more common rebound and overshoot hypertension that occurs when a patient simply stops taking his antihypertensive medication.

Although we are also familiar with the reports of severe high blood pressure when other drugs are suddenly discontinued, the cited references are not germane to our case. Dr. Houston is talking about rebound or overshoot hypertension and we described a singular circumstance in which severe and unremitting hypertension is related to catecholamines and drug withdrawal rather than a static state of sodium balance or the renin-angiotensin system. It was the uniqueness of this clinical setting of dialysis and bilateral nephrectomy that makes our remarks about clonidine and catecholamines justified. If the postoperative hypertension in this patient was not due to catecholamines or increased sympathetic discharge, what was it due to?

Finally, I doubt that our brief report could have been titled "Propranolol Withdrawal Complicating Bilateral Nephrectomy" as our patient was receiving propranolol after surgical operation and still required nitroprusside and phentolamine for acceptable blood pressure control to be achieved. This control was not accomplished until the seventh postoperative day when clonidine administration was reinstituted.

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